CULTURAL RESOURCES SURVEY OF THE LORING MILL 115kV PROJECT, SUMTER COUNTY, SOUTH CAROLINA

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ABSTRACT

This study reports on an intensive cultural resources survey of a 1.1 mile transmission line and substation in the central portion of Sumter County, just west of the city of Sumter, South Carolina. The work was conducted to assist Central Electric Power Cooperative in complying with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The corridor is to be used by Central Electric Power Cooperative for the construction of a transmission line and substation. The transmission line will tie into an existing powerline easement to the west and will travel east to the Loring Mill Road Substation. The topography is generally level with a few low, wet areas.

The proposed substation and transmission line will require the clearing of the area, followed by construction of the proposed facility and powerlines. These activities have the potential to affect archaeological and historical sites and this survey was conducted to identify and assess archaeological and historical sites which may be in the project corridor. For this study an area of potential effect (APE) 0.5 mile around the substation and transmission line was assumed. It should be noted, however, that the area is currently affected by several other projects including other transmission line easements, road reworking and construction, and development of several neighborhoods and businesses.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology identified four sites (38SU125, 38SU127, 38SU276, and 38SU277) in the project APE. Site 38SU125 is a late nineteenth to early twentieth and prehistoric scatter; 38SU127 is a late nineteenth to early twentieth century rubble pile; 38SU276 is a late nineteenth to mid-twentieth century scatter; and 38SU277 is a late nineteenth to twentieth century scatter. All four sites were recommended not eligible for the National Register of Historic Places.

The S.C. Department of Archives and History GIS was consulted for any previously recorded sites. No such sites were found in the project APE. A 1978-79 survey of Sumter County by Gray and Kolbe was also consulted. One site, Dinkins Plantation, was recorded on the edge of the 0.5 mile APE. The house was constructed c. 1810, but the evaluation at the time was that it was "too altered for" the National Register (S.C. Department of Archives and History form recorded by W. Gray on 7-6-78).

The archaeological survey of the corridor incorporated shovel testing at 100-foot intervals along the centerline of the proposed corridor right-of-way. All shovel test fill was screened through ¼-inch mesh and the shovel tests were backfilled at the completion of the study. A total of 60 shovel tests were excavated along the center of the 75-foot right-of-way. No testing was performed at the substation since it already been graded at the time of the survey, however additional testing was performed for the identified site along the periphery of the substation.

As a result of these investigations, one site, 38SU300, was identified. The site is a late nineteenth to early twentieth century surface scatter that is recommended not eligible for the National Register of Historic Places for its poor integrity and inability to address significant research questions.

A survey of public roads within a 0.5 mile

of the proposed undertaking was conducted in an effort to identify any architectural sites over 50 years old which also retained their integrity. No such sites were found. Dinkins Plantation was revisited and we still recommend the structure not eligible for the National Register.

Finally, it is possible that archaeological remains may be encountered in the project area during clearing activities. Crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy L. Jackson of Central Electric Power Cooperative in Columbia, South Carolina. The work was conducted to assist Central Electric Power Cooperative comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of a corridor measuring about 5,900 feet, or approximately 1.1 miles and a substation, situated in central Sumter County about 1.5 miles west of the city of Sumter (Figure 1). The corridor begins from an existing powerline near S-983 (Deschamps Road) and runs east to a new substation at S-204 (Loring Mill Road).

The corridor consists of generally level land with forests of mixed pines and hardwoods, pine forest, fallow field, and a cypress bay. The substation had been graded at the time of this survey, but was located almost entirely in the bay.

The corridor, as previously mentioned, is intended to be used as a transmission route for a 115kV power line. Landscape alteration, primarily clearing, subsequent erection of the poles and other facilities, erecting lines, and long-term maintenance of the corridor will cause some damage to the ground surface and any archaeological resources that may be present in the survey area.

Construction, operation, and maintenance of the substation may also have an impact on historic resources in the project area. Although the project will not remove any structures, substations (as well as other above grade projects) may detract from the visual integrity of historic properties, creating what many consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) about 0.5 mile in diameter around the proposed facility. As was mentioned, the area has already been greatly affected by road construction and widening, residential and commercial development, and existing transmission lines.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Sumter County.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to perform a cultural resources survey on April 8, 2004. This included examination of the site files at the S.C. Institute of Archaeology and Anthropology. As a result of that work, four sites(38SU125, 38SU127, 38SU276, and 38SU277) were identified. Site 38SU125 is a late nineteenth to early twentieth and prehistoric scatter; 38SU127 is a late nineteenth to early twentieth century rubble pile; 38SU276 is a late nineteenth to mid-twentieth century scatter; and 38SU277 is a late nineteenth to twentieth century scatter. All four sites were recommended not eligible for the National Register of Historic Places.

Initial background investigations also incorporated a review of the site files at the South Carolina Department of Archives and History. As a result of that work one site was identified in the 0.5 mile APE. Dinkins Plantation, located on the edge of the APE, was recommended not eligible for the National Register due to modern alterations.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The archaeological survey was conducted

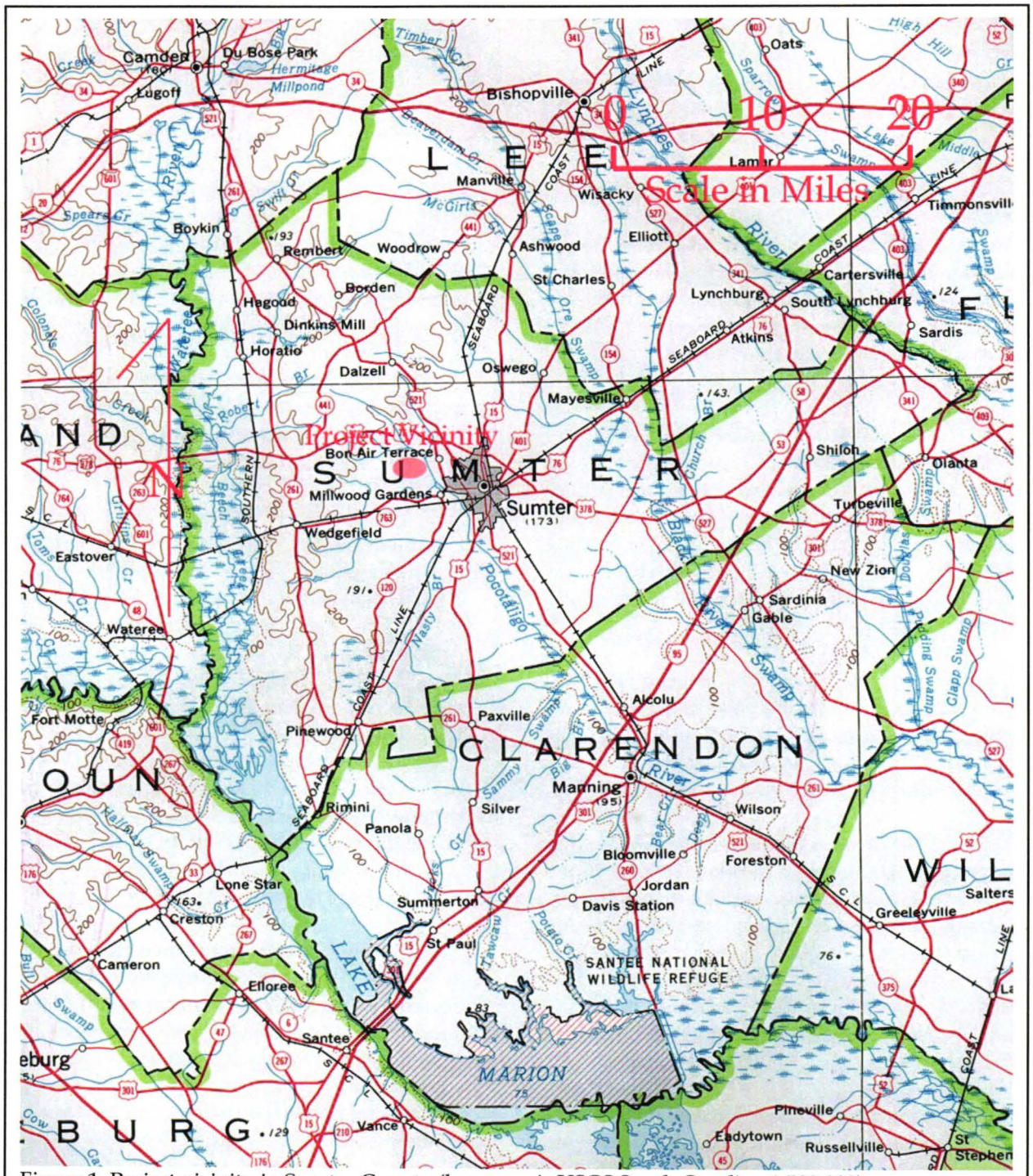

Figure 1. Project vicinity in Sumter County (basemap is USGS South Carolina 1:500,000).

from May 18-19, 2004 by Ms. Nicole Southerland and Mr. Tom Covington under the direction of Dr. Michael Trinkley.

This report details the investigation of the project area undertaken by Chicora Foundation and the results of that investigation.

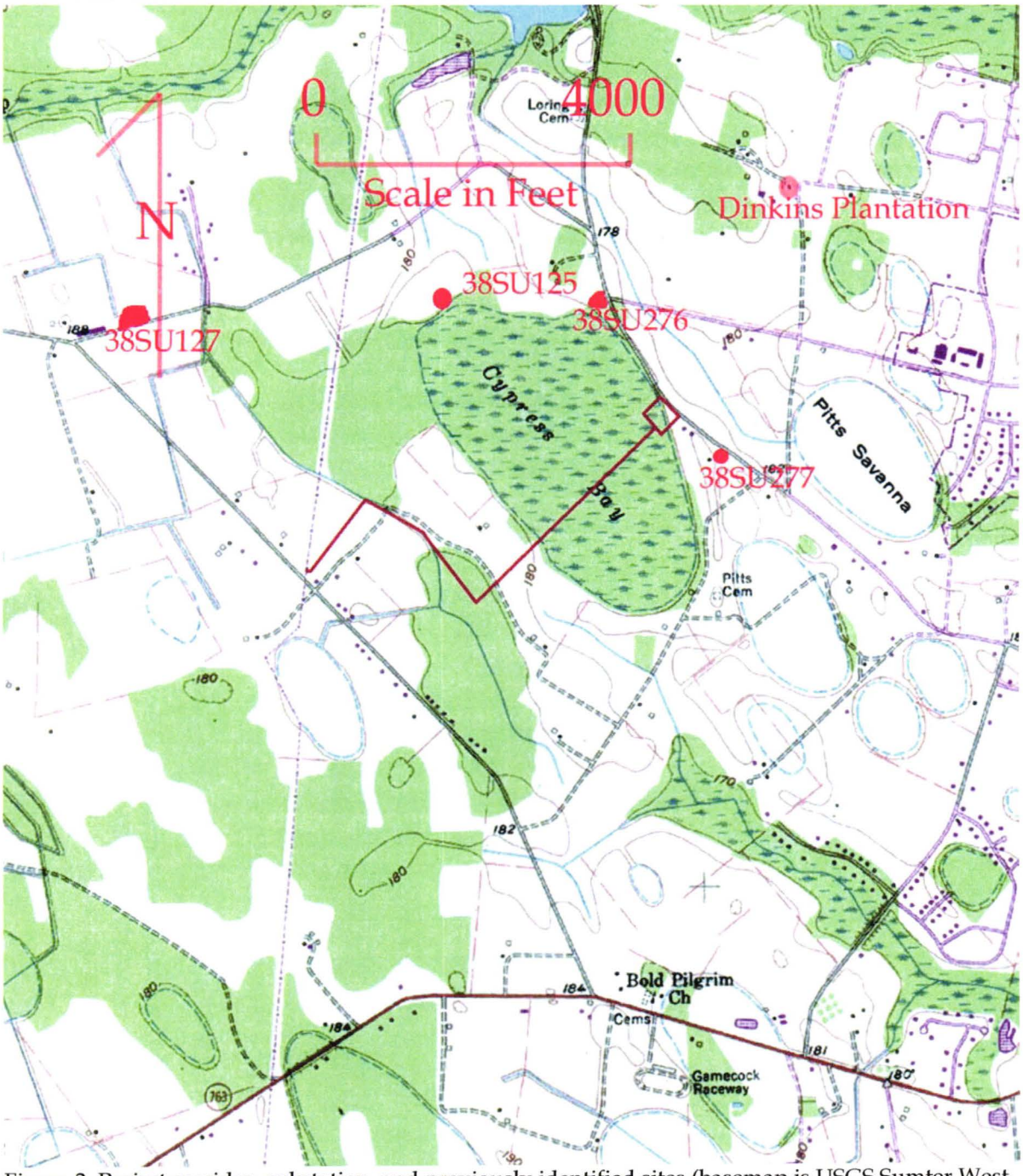

Figure 2. Project corridor, substation, and previously identified sites (basemap is USGS Sumter West 7.5′).

ENVIRONMENTAL BACKGROUND

This project, situated on the western outskirts of the City of Sumter, is located in the east-central part of South Carolina about 40 miles east of Columbia in Sumter County. Sumter County contains about 690 square miles, or 441,923 acres, although this has varied throughout the twentieth century (Bennett et al. 1909:299; Burke et al. 1943:1; Pitts 1974). Sumter, which is roughly triangular in shape, is bounded to the north by Kershaw and Lee counties, to the east by Lynches River, to the south by Claredon and Florence counties, and to the west by the Wateree and Santee rivers.

Physiography

Four primary drainages are found in Sumter County: the Wateree, the Pocotaligo, the Black, and the Lynches, all of which drain from the north to the south or south-southeast.

Sumter County is primarily within the Inner Coastal Plain physiographic province. This area is very similar in many aspects to the Middle Coastal Plain, though, because of extensive weathering, the relief is quite different (Barry 1980:113). Topography varies from nearly level to moderately sloping, and four divisions have been recognized by Burke et al. (1943:2-3), including the river bottoms and terraces of the Wateree and Santee rivers, the Sandhills, the Middle Coastal Plain, and the Flatwoods.

The river bottoms are found east of and parallel to the Santee and Wateree rivers. In the northern part of the county these bottoms are narrow and well defined, as they are flanked by high river terraces. In southern Sumter County the floodplains extend back to the uplands, often up to 2 miles. The areas of frequent flooding are characterized by hardwood bottoms while areas less often flooded have hardwood and bottom forests (see Barry 1980:154-158). The adjacent terraces are infrequently flooded and support a willow-alder forest. Edmund Ruffin, in the late antebellum, commented that the Wateree was narrow on the Richland County side, but about 4 miles wide on the Sumter side, where "on the river, it has been imperfectly embanked & is under corn," yet it was "not the best quality of swampland" (Mathew 1992:261).

The Sandhills follow a northward course from the lower reaches of the Wateree River to the upper part of the Santee drainage where they swing northeast to he vicinity of Hillcrest School.

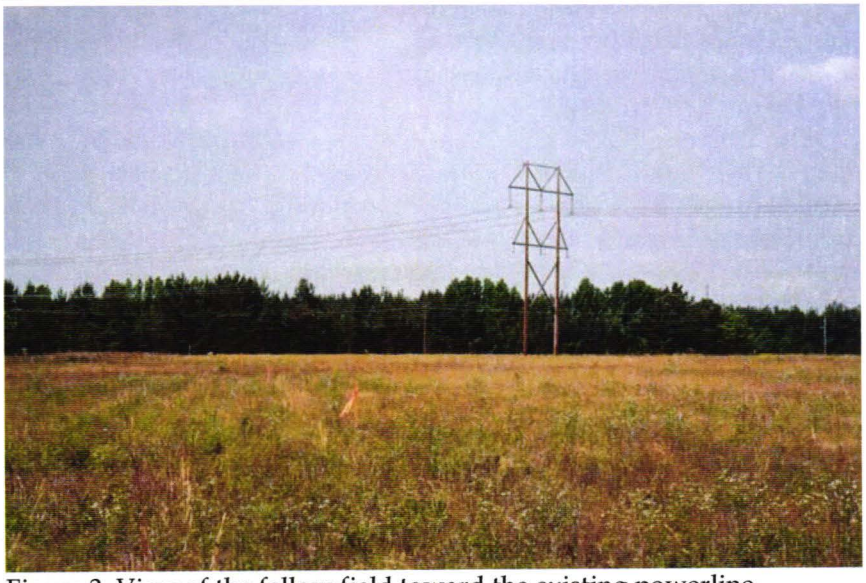

Figure 3. View of the fallow field toward the existing powerline.

This area has been called the High Hills of Santee (Cooke 1936), although it is simply part of the Sandhills transitional zone from the Piedmont to the Coastal Plain. The topography is hilly and broken in the central part, while the elevations are smoother toward the south and northeast. Slopes are generally toward the north and west.

Ruffin described the Sumter area Sandhills in the late antebellum as:

> rolling, & the hills sometimes even steep, but never long. The soil is of deep sand & very poor. The growth pine intermixed with small scrub & other oaks. The general appearance is like that of Sandy Island, except not so barren & naked, & the oaks much larger. Indeed, at the residences, & where the pines have been cut out, the oaks are coaxed up to a respectable size. For 5 or 6 miles after entering the sand-hills, the country seemed as desolated as possible. Not a creature was seen, nor any mark of man's neighborhood, save the deep sandy track in which I was riding (Mathew 1992:262).

The Middle Coastal Plain is roughly correlated with the upland part of the county, intermediate between the Sandhills and the Flatwoods. The topography is smooth and undulating. Mesic woodlands occur in greater quantities than in the Sandhills, although there are a myriad of edaphic conditions in this area, which result in a mosaic of plant communities (Barry 1980:133-135). Primary is the mesic mixed hardwoods and pine community, which consists of loblolly pine, white and red oaks, sweetgum, beech, and hickories.

The Flatwoods are broad flat areas, which consists of few low ridges and bay depressions. The most common depressions in the Coastal Plain are Carolina bays, usually marshy and oval in shape (Richards 1950:45-56). Water depth varies from shallow lakes to areas with a preponderance of peat and herbaceous species (Barry 1980:131-133). Ruffin also briefly mentioned these features, noting that they made good pasturage for cattle (Mathew 1992:210). Soils in this area are poorly drained loamy sands and the typical vegetation is usually mesic or swampy, often characterized by bay trees. The Flatwoods are cut by small streams bordered by ridges that are often cultivated.

The project corridor runs through the Sandhills. The topography stays relatively level even from the transition to the wetland. The corridor crosses one drainage from Mush Swamp, while about 1,000 feet of the survey crosses the cypress bay.

Geology and Soils

Elevations in Sumter County range from slightly above 100 feet above mean sea level (AMSL) in the bottoms to above 250 feet in the Sandhills region (Bennett et al. 1909:300). These elevations reflect the local geology. The Sandhill province may represent the remnants of former Cretaceous period beaches or possibly alluvial deposits derived from the Piedmont Tuscaloosa formation (Barry 1980:97-99; Smith 1933). In the Sumter County area the underlying geologic formation is the Tuscaloosa. The remainder of the County falls within the Black Mingo and more recent Tertiary formations. These Coastal Plain formations rest on rocks of a much older crystalline complex (Siple 1957:24). Overlying the Coastal Plain formations are soil series consisting of loamy sands and sandy loams. The major soil series are Lynchburg, Coxville, Norfolk, Wagram, Goldsboro, Lakeland, Rains, and Duplin (Pitts 1974:1). All are formed in clayey or sandy coastal plain sediment.

The proposed transmission line crosses five soil series. These include Pantego, Rains, Orangeburg, Norfolk, and Troup. The most commonly found soil in the corridor, Pantego loam, is found within the bay. This series has an A horizon of black (N2/0) loam to a depth of 0.9

Figure 4. View of pines and hardwoods along the corridor.

foot over a very dark gray (10YR3/1) sandy clay loam to just over 1.0 foot. This soil is very poorly drained with a seasonal high water table of about 1.0 foot in depth.

The other wetland area encountered on the corridor consists of Rains sandy loam, which is also poorly drained and has a high water table of 1.0 foot in depth. This series has an A horizon of very dark gray (10YR3/1) sandy loam to a depth of 0.6 foot over a light brownish gray (10YR6/2) sandy loam to 1.0 foot in depth.

The remaining three soils are well drained and occur in nearly level topography. The Orangeburg Series has an Ap horizon of grayish brown (10YR5/2) loamy sand to a depth of 0.9 foot over a pale brown (10YR6/3) loamy fine sand to a depth of 1.3 feet. Norfolk soils have a similar profile with an Ap horizon of grayish brown (10YR5/2) to a depth of 0.7 foot over a pale brown (10YR6/3) loamy sand to just over 1.0 foot in depth.

Troup soils have a surface layer of very dark gray (10YR3/1) sand to a depth of 0.3 foot over a pale brown (10YR6/3) sand to 2.0 feet in depth.

Climate

The project area is characterized by a humid, temperate to semi-tropical climate. The controlling factor appears to be the proximity of the Atlantic Ocean and the Gulf Stream. Winters are relatively short with recurring spells of freezing weather, rain, and mild pleasant weather. The mean winter temperature is 48° F. Snow is uncommon. Summers are long and very warm. The mean summer temperature is 79°F and during this season there are relatively few complete exchanges of air masses because tropical maritime air persists for extended periods (Pitts 1974:107-108). This creates "hot, oppressive weather" (Burke et al. 1943:4). The mean annual precipitation is 44.5 inches, with the greatest amount occurring in the summer. The average frost free season is 229 days.

Although this is a generally mild climate, Ruffin commented in the late antebellum that, "it is a prevailing opinion of the planters that the climate of lower S.C. is unfavorable to the growth of corn; & that the land cannot produce it" (Mathew 1992:152). This impression was probably based on the poor, droughty nature of the soils and reinforced by the preference for cash crops such as cotton. Certainly the bulk of the soils in the project area are capable of producing from 25 to 50 bushels of corn per acre (Pitts 1974:Table 3).

Floristics

As mentioned, the vegetation of the Sumter County area varies from xeric to mesic mixed hardwoods and pine in the Sandhills and uplands to cypress-tupelo swamps and hardwood bottoms in the lower elevations. The xeric

communities include loblolly pine, post oak, southern red oak, mockernut and pignut hickories. The mesic plants include loblolly pine, as well as white oak, sweetgum, beech, southern sugar maple, dogwood, and hickories. The wetland vegetation includes bald cypress, water tupelo, water ash, red maple, black willow, sycamore, and cottonwood (see Barry 1980; Shelford 1963). Pitts (1974:1) notes that about 36% of the county is cultivated, 2% in pasture, and 53% is wooded. Much of the survey corridor is forested in a mixed pine and hardwood forest, although a portion of the corridor is also pine forests and fallow field. Most of the corridor runs through a bay, which was relatively dry at the time of the survey.

One of the more thorough studies of the Santee River swamp was produced by a legislative committee to evaluate timber harvesting in the swamp area. Their findings are applicable, on a general level, not only to the main swamp, but also to the smaller, subsidiary swamps. The study found the swamp to offer the best wintering habitat for mallards, wood ducks, and black ducks, with the primary feeding and nesting trees including willow oaks and tupelo-gum. The habitat for squirrel and raccoon is similar and both rely on the oaks for mast production. Turkey populations were found to be low, although the swamp habitat is excellent. This report also notes that:

> present Santee Swamp habitat conditions for deer closely approximate those found in other coastal plain hardwood swamps. These swamp areas in general have the highest carrying capacity for deer of all coastal plain environments (Mahan 1976:66).

One of the primary reasons for the swamp's high productivity is that 70% of the trees over 12-inches DBH are ether willow oaks or tupelo-gum. The willow oaks group includes the true willow oak, water oak, and laurel oak. These species are of particular importance because of their abundant mast production (Reamer 1975:16).

PREHISTORIC AND HISTORIC SYNOPSIS

Previous Research

Of the 36 reports listed in Derting et al. (1991), 27 (75%) are compliance projects. Several projects have taken place in the vicinity of the current corridor. Two such examples involve road widenings and extensions (Joseph et al. 1995; Harvey et al. 1998) while another involves another transmission project (Trinkley and Southerland 2001). These are just a few of the projects in this rapidly growing portion of Sumter County.

Prehistoric Overview

Overviews for South Carolina's prehistory, while of differing lengths and complexity, are available in virtually every compliance report prepared. There are, in addition, some "classic" sources well worth attention, such as Joffre Coe's *Formative Cultures* (Coe 1964), as well as some new general overviews (such as Sassaman et al. 1990 and Goodyear and Hanson 1989). Also extremely helpful, perhaps even essential, are a handful of recent local synthetic statements, such as that offered by Sassaman and Anderson (1994) for the Middle and Late Archaic and by Anderson et al. (1992) for the Paleoindian and Early Archaic. Only a few of the many sources are included in this study, but they should be adequate to give the reader a "feel" for the area and help establish a context for the various sites identified in the study areas. For those desiring a more general synthesis, perhaps the most readable and well balanced is that offered by Judith Bense (1994), *Archaeology of the Southeastern United States: Paleoindian to World War I.* Figure 3 offers a generalized view of South Carolina's cultural periods.

Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965). Oliver (1981, 1985) has proposed to extend the Paleoindian dating in the North Carolina Piedmont to perhaps as early as 14,000 B.P., incorporating the Hardaway Side-Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, as representatives of the terminal phase. This view, verbally suggested by Coe for a number of years, has considerable technological appeal.[1] Oliver suggests a continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Side-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted.

The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Survey data for Paleoindian tools, most notably fluted points, is somewhat dated, but has been summarized by Charles and Michie (1992). They reveal a widespread distribution across the state (see also

[1] While never discussed by Coe at length, he did observe that many of the Hardaway points, especially from the lowest contexts, had facial fluting or thinning which, "in cases where the side-notches or basal portions were missing, . . . could be mistaken for fluted points of the Paleo-Indian period" (Coe 1964:64). While not an especially strong statement, it does reveal the formation of the concept. Further insight is offered by Ward's (1983:63) all too brief comments on the more recent investigations at the Hardaway site (see also Daniel 1992).

Anderson 1992b:Figure 5.1) with at least several concentrations relating to intensity of collector activity. What is clear is that points are found fairly far removed from the origin of the raw material. Charles and Michie suggest that this may "imply a geographically extensive settlement system" (Charles and Michie 1992:247).

Although data are sparse, one of the more attractive theories that explains the widespread distribution of Paleoindian sites is the model tracking the replacement of a high technology forager (or HTF) adaptation by a "progressively more generalized band/microband foraging adaption" accompanied by increasingly distinct regional traditions (perhaps reflecting movement either along or perhaps even between river drainages) (Anderson 1992b:46).

Distinctive projectile points include lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian projectile points was proposed by Williams (1965:24-51), but according to Phelps (1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable expectation), there is a large body of circumstantial evidence. The weight of this evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

Archaic Period

The Archaic Period, which dates from 10,000 to 3,000 B.P.[2], does not form a sharp break with the Paleoindian Period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited animal. Archaic period assemblages, exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

Many researchers have reported data suggestive of a noticeable population increase from the Paleoindian into the Early Archaic. This

[2] The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether ceramics, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics provides a convenient marker for separation of the Archaic and Woodland periods (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson (1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the Sandhills, unfortunately, is not well known.

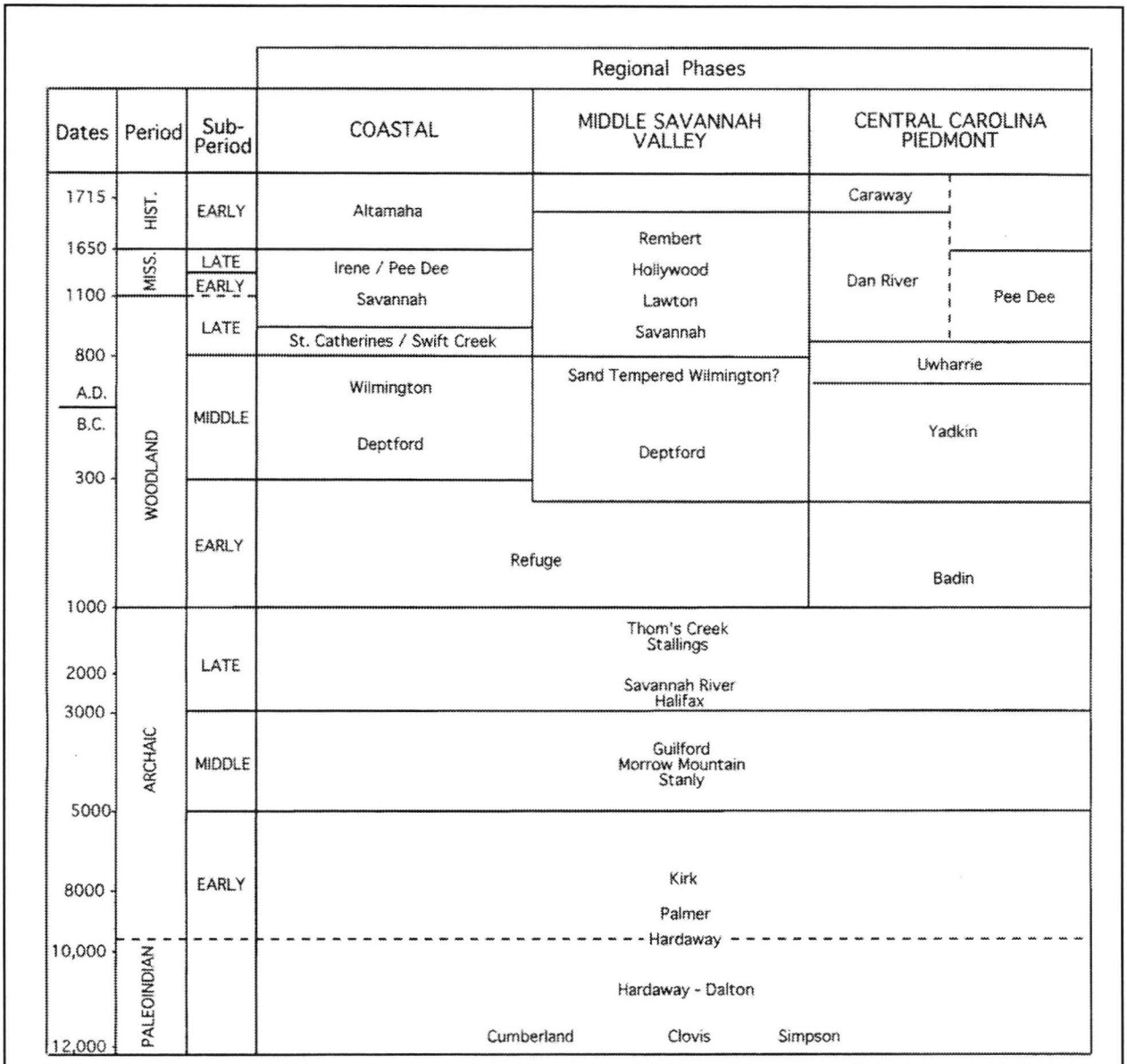

Figure 5. Generalized cultural sequence for South Carolina.

has tentatively been associated with a greater emphasis on foraging. Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. As previously discussed, Palmer points may be included with either the Paleoindian or Archaic period, depending on theoretical perspective. As the climate became hotter and drier than the previous Paleoindian period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies.

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites which can best be considered base camps. Hardaway might be one such site. In addition, there were numerous small sites which produce only a few artifacts -

these are the "network of tracks" mentioned by Ward (1983:65). The base camps produce a wide range of artifact types and raw materials which has suggested to many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites are thought of as special purpose or foraging sites (see Ward 1983:67).

Middle Archaic (8,000 to 6,000 B.P.) diagnostic artifacts include Morrow Mountain, Guilford, Stanly and Halifax projectile points. Much of our best information on the Middle Archaic comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Associated with these technological changes there seem to also be some significant cultural modifications. Prepared burials begin to more commonly occur and storage pits are identified. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

Among the most common of all Middle Woodland artifacts is the Morrow Mountain Stemmed projectile point. Originally divided into two varieties by Coe (1964:37,43) based primarily on the size of the blade and the stem, Morrow Mountain I points had relatively small triangular blades with short, pointed stems. Morrow Mountain II points had longer, narrower blades with long, tapered stems. Coe suggested a temporal sequence from Morrow Mountain I to Morrow Mountain II. While this has been rejected by some archaeologists, who suggest that the differences are entirely related to the life-stage of the point, the debate is far from settled and Coe has considerable support for his scenario.

The Morrow Mountain point is also important in our discussions since it represents a departure from the Carolina Stemmed Tradition. Coe has suggested that the groups responsible for the Middle Archaic Morrow Mountain (and the later Guilford points) were intrusive ("without any background" in Coe's words) into the North Carolina Piedmont, from the west, and were contemporaneous with the groups producing Stanly points (Coe 1964:122-123; see also Phelps 1983:23). Phelps, building on Coe, refers to the Morrow Mountain and Guilford as the "Western Intrusive horizon." Sassaman (1995) has recently proposed a scenario for the Morrow Mountain groups which would support this west-to-east time-transgressive process. Abbott and his colleagues, perhaps unaware of Sassaman's data, dismiss the concept, commenting that the shear distribution and number of these points "makes this position wholly untenable" (Abbott et al. 1995:9).

The controversy surrounding Morrow Mountain also includes its posited date range. Coe (1964:123) did not expect the Morrow Mountain to predate 6500 B.P., yet more recent research in Tennessee reveals a date range of about 7500 to 6500 B.P. Sassaman and Anderson (1994:24) observe that the South Carolina dates have never matched the antiquity of their more western counterparts and suggest continuation to perhaps as late as 5500 B.P. In fact they suggest that even later dates are possible since it can often be difficult to separate Morrow Mountain and Guilford points.

A recently defined point is the MALA. The term is an acronym standing for Middle Archaic and Late Archaic, the strata in which these points were first encountered at the Pen Point site (38BR383) in Barnwell County, South Carolina (Sassaman 1985). These stemmed and notched lanceolate points were originally found in a context suggesting a single-episode event with variation not based on temporal variation. The original discussion was explicitly worded to avoid

application of a typology, although as Sassaman and Anderson (1994:27) note, the "type" has spread into more common usage. There are possible connections with both the Halifax points of North Carolina and the Benton points of the middle Tennessee River valley, while the "heartland" for the MALA appears confined to the lower middle Coastal Plain of South Carolina.

The available information has resulted in a variety of competing settlement models. Some argue for increased sedentism and a reduction of mobility (see Goodyear et al. 1979:111). Ward argues that the most appropriate model is one which includes relatively stable and sedentary hunters and gatherers "primarily adapted to the varied and rich resource base offered by the major alluvial valleys" (Ward 1983:69). While he recognizes the presence of "inter-riverine" sites, he discounts explanations which focus on seasonal rounds, suggesting "alternative explanations . . . [including] a wide range of adaptive responses." Most importantly, he notes that:

> the seasonal transhumance model and the sedentary model are opposite ends of a continuum, and in all likelihood variations on these two themes probably existed in different regions at different times throughout the Archaic period (Ward 1983:69).

Others suggest increased mobility during the Archaic (see Cable 1982). Sassaman (1983) has suggested that the Morrow Mountain phase people had a great deal of residential mobility, based on the variety of environmental zones they are found in and the lack of site diversity. The high level of mobility, coupled with the rapid replacement of these points, may help explain the seemingly large numbers of sites with Middle Archaic assemblages. Curiously, the later Guilford phase sites are not as widely distributed, perhaps suggesting that only certain micro-environments were used (cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. argue for a combination of these models, noting that the almost certain increase in population levels probably resulted in a contraction of local territories. With small territories there would have been significantly greater pressure to successfully exploit the limited resources by more frequent movement of camps. They discount the idea that these territories could have been exploited from a single base camp without horticultural technology. Abbott and his colleagues conclude, "increased residential mobility under such conditions may in fact represent a common stage in the development of sedentism" (Abbott et al. 1995:9).

From excavations at a Sandhills site in Chesterfield County, South Carolina, Gunn and his colleague (Gunn and Wilson 1993) offer an alternative model for Middle Archaic settlement. He accepts that the uplands were desiccated from global warming, but rather than limiting occupation, this environmental change made the area more attractive for residential base camps. Gunn and Wilson suggest that the open, or fringe, habitat of the upland margins would have been attractive to a wide variety of plant and animal species.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued to intensively exploit the uplands much like earlier Archaic groups with the bulk of our data for this period coming from the Uwharrie region in North Carolina.

One of the more debated issues of the Late Archaic is the typology of the Savannah River Stemmed and its various diminutive forms. Oliver, refining Coe's (1964) original Savannah River Stemmed type and a small variant from Gaston (South 1959:153-157), developed a complete sequence of stemmed points that

decrease uniformly in size through time (Oliver 1981, 1985). Specifically, he sees the progression from Savannah River Stemmed to Small Savannah River Stemmed to Gypsy Stemmed to Swannanoa from about 5000 B.P. to about 1,500 B.P. He also notes that the latter two forms are associated with Woodland pottery.

This reconstruction is still debated with a number of archaeologists expressing concern with what they see as typological overlap and ambiguity. They point to a dearth of radiocarbon dates and good excavation contexts at the same time they express concern with the application of this typology outside the North Carolina Piedmont (see, for a synopsis, Sassaman and Anderson 1990:158-162, 1994:35).

In addition to the presence of Savannah River points, the Late Archaic also witnessed the introduction of steatite vessels (see Coe 1964:112-113; Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-44). This innovation is of special importance along the Georgia and South Carolina coasts, but seems to have had only minimal impact in the uplands of South or North Carolina.

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record indicates an increase in pine, which reduced the oak-hickory nut masts, which previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system. While it is unlikely that this model can be simply transferred to the Sandhills of South Carolina without an extensive review of site data and micro-environmental data, it does demonstrate one approach to understanding the transition from Archaic to Woodland.

Woodland Period

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. These sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included are Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late as 2,500 B.P. with the introduction of pottery, which is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

There remains, in South Carolina, considerable ambiguity regarding the pottery series found in the Sandhills and their association with coastal plain and piedmont types. The earliest pottery found at many sites may be called either Deptford or Yadkin, depending on the research or their inclination at any given moment.

The Deptford phase, which dates from 3050 to 1350 B.P., is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Inner Coastal Plain/Sand Hills, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972;

Trinkley 1980). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98; see also Sassaman 1993 for similar data recovered from 38AK157).

Further to the north and west, in the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin.[3] This pottery is identified as having very fine sand in the paste with an occasional pebble. Coe identified cord-marked, fabric-marked, net-impressed, and plain surface finishes. Beyond this pottery little is known about the makers of the Badin wares and relatively few of these sherds are reported from South Carolina sites.

Somewhat more information is available for the Middle Woodland, typically given the range of about 2,300 B.P. to 1,200 B.P. In the Piedmont and even into the Sand Hills, the dominant Middle Woodland ceramic type is typically identified as the Yadkin series. Characterized by a crushed quartz temper the pottery includes surface treatments of cord-marked, fabric-marked, and a very few linear check-stamped sherds (Coe 1964:30-32). It is regrettable that several of the seemingly "best" Yadkin sites, such as the Trestle site (31An19) explored by Peter Cooper (Ward 1983:72-73), have never been published.

Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least 1650 B.P. coexisted with this Triangular Tradition. The Yadkin in South Carolina has been best explored by research at 38SU83 in Sumter County (Blanton et al. 1986) and at 38FL249 in Florence County (Trinkley et al. 1993)

In some respects the Late Woodland (1,200 B.P. to 400 B.P.) may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500-700 years. From the vantage point of the Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

Historical Synopsis

The area, which is today Sumter County, was primarily occupied by the Santee and Wateree Indians, with the earliest accounts taken from Spanish explorers in 1526 (Quattlebaum 1956). During the Yemassee War of 1715 both the Wateree and the Santee joined the Indian conspiracy, only to have their power broken. Afterwards the remnants apparently joined together, possibly with the Catawba (Swanton 1946). Gregorie (1954:7) mentions that Sumter County remained part of the Catawba hunting territory at least as late as 1748, with a camp existing near "The Raft" in the Wateree River Swamp until 1750. Mills, in the early nineteenth century, expressed the situation concisely:

> [a] number of tribes of Indians inhabited this country originally; but little care has been taken to preserve either their names or

[3] The ceramics suggest clear regional differences during the Woodland which seem to only be magnified during the later phases. Ward (1983:71), for example, notes that there are "marked distinctions" between the pottery from the Buggs Island and Gaston Reservoirs and that from the south-central Piedmont.

locations (Mills 1972:749 [1826]).

Present day Sumter County is within the area known as Craven County in eighteenth century land grants from east of the Wateree River, although this term was purely a geographical expression (Gregorie 1954:22). The province of South Carolina was organized into parishes as a result of the 1706 Church Act, with Sumter being situated in Prince Frederick's Parish. In spite of early land grants the area was not settled until about 1740, and then primarily by small farmers and cattle herders. These early settlers had grants on headrights of 50 acres for each member of the family, including slaves, and Gregorie (1954:15) notes that seldom were the grants larger than 500 acres. These first settlements were apparently along the Santee River and consisted on both local people moving inland from Williamsburg and Scotch-Irish from the northern colonies (Revill 1968:2). Mills, however, suggests a later date for permanent settlement:

> the first permanent settlement in this district took place about the year 1750, at which time Samuel and James Bradley located themselves in the eastern portion of the district, now called Salem. Previous to this, however, the country had been occupied by herdsmen, who raised great numbers of cattle, and who moved about from place to place, as the range suited them (Mills 1972:740 [1826]).

Settlement was slow in the vicinity of Sumter County until about 1750, when Virginians began to arrive in the Sandhills area, which became known as the "Virginia settlement" (Stubbs 1951:n.p.).

By 1757 this area was separated from Prince Frederick's Parish and was named St. Mark's, with boundaries established from the Williamsburg Township to the Santee and Pee Dee rivers, encompassing all the area between the rivers northward to the North Carolina line (Gregorie 1954:24; Revill 1968:2). In spite of this, no church was built as late as 1772 because of "late distress in the back parts, [and] the present high taxes" (South Carolina Department of Archives and History, Journals of the House of Commons 35:50).

These earliest settlers were described by the Rev. James Harrison as living in "hovels of unhewn logs, which seldom contained more than two rooms" (Gregorie 1954:17). Charles Woodmason, an itinerant minister in St. Mark's Parish, provides an even more descriptive account of the frontier settlements, noting that the first dwellings were built on the edge of the swamps so that the small planters could view their slaves at work in the rice fields. Further, because water supply was essential, most settlements were adjacent to springs or water sources (Gregorie 1954:16). The Catawba Path, which ran down the eastern side of the Wateree from Fredericksburg to the High Hills and down the Santee to Charleston, was not made a public road until 1753. At the same time work was begun to improve river navigation (Gregorie 1954:8-9). Woodmason described one of their houses as a "cold, open dark logg Cabbin, in the midst of Noise and People" (quoted in Gregorie 1954:17). Poverty was, in places, extreme:

> in many places they have nought but a gourd to drink out of. Not a plate, Knive or Spoon, a Glass, Cup, or anything. It is well is they can get body linen and some have not even that (Woodmason quoted in Nicholes 1975:11).

The early agriculture was of at the level of simple subsistence, with an emphasis on corn, wheat, and rice in the lowlands. There were a few staple vegetables, flax for spinning, and tobacco for home use. Indigo was grown in the early days and exported to England, primarily because of the English bounty for its production (Bennett et al. 1909:302; Burke et al. 1943:5; Gregorie 1954:17).

The upland pine forests offered more profitable opportunities than agriculture and large quantities of tar, turpentine, rosin, staves, shingles, and lumber were harvested (Bennett et al. 1909:302; Burke et al. 1943:5; Gregorie 1954:17). At the same time the cattle rounded up from swamp bottoms provided an additional source of cash (Gregorie 1954:18).

During the late eighteenth century Sumter County went through a series of administrative boundary changes. In 1769 the state was divided into court districts and Sumter was contained in the Camden District. In 1785 the legislature created counties and the Camden District was divided into Clarendon and Claremont counties, with Salem established in 1792. The Sumter Judicial District was established in 1798 by the combination of Clarendon, Claremont, and Salem counties (Gregorie 1954:3; Revill 1968:35-38).

These legal changes did little to alter the basic framework of frontier life. Perhaps the most significant political and economic event, which brought about the creation of counties, was the Revolutionary War. In addition to the administrative changes, the bounty for indigo was no longer available and production of this cash crop ceased (Gregorie 1954:56). The search for a new cash crop lead to cotton, which was introduced about 1785, although it was not until the 1793 invention of the cotton gin that the crop became common (Burke et al. 1943:6). A cotton factory was built near Statesburg on the plantation of Benjamin Waring in 1789, although it was abandoned and sold after 1791 because of poor public support (Gregorie 1954:108-109).

By the turn of the century green seed cotton was being commonly planted. Gregorie notes that:

> the old staples, rice and indigo, had required large outlays of capital, and great plantations with slave gangs for the laborious work. Cotton, however, was a poor man's crop, and could be raised by white families that did not own even a single salve. But the profits of the crop in its early years, stirred ambitions in even the poorest farmers to buy more land and to acquire slaves (Gregorie 1954:109-110).

The early slave density in Sumter was about three to five slaves per white family, with the largest plantation in the 1790 Claremont County census owning only 145 slaves (Gregorie 1954:31). The 1790 census for both Claremont and Clarendon counties numerate 2,910 slaves. By 1800 that number had increased to 6,563, and by 1820 there were over 16,000 slaves in Sumter District (Mills 1972:748 [1826]). At that time Mills observed that the, "patrol laws are badly executed," and that the slaves are "numerous, and great pilferers" (Mills 1972:746 [1826]).

In spite of the sudden increase in the number of slaves and the size of land holdings, cotton prices had fallen from 444 per pound in 1799 to only 204 a pound in 1806. By 1812 the price was down to 424 and there began the long trek westward in search of new and more productive lands (Gregorie 1954:110). This migration continued through the 1850s and in 1834 Camden reported 800 persons a year passing through to the west (Gregorie 1954:114).

In 1800 the decision was made to build the Sumter District courthouse at or near the plantation of John Gayle and $5,000 was allowed by the legislature for that purpose. Until the completion of the courthouse on the public square at Liberty and Broad (now Main) streets in 1806, court was held in Gayle's farmhouse, which stood at the corner of Carol and Main streets (Gregorie 1954:89-91). Gregorie notes that:

> the choice of the site for the courthouse town [in Sumterville, or present day Sumter] caused some surprise, for it was in a rather low and poorly drained section, at some distance from a

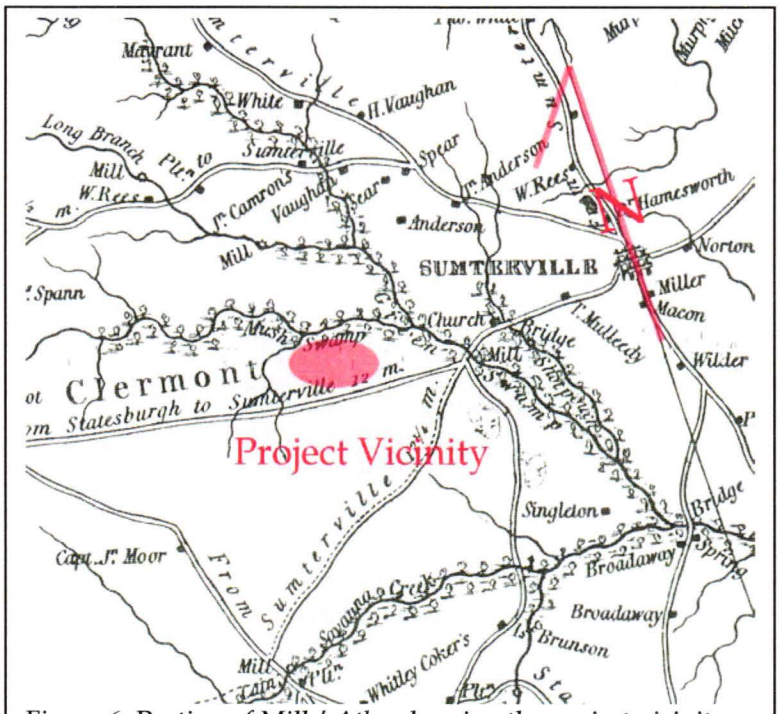

Figure 6. Portion of Mills' *Atlas* showing the project vicinity.

navigable stream and even from a highway (Gregorie 1954:90).

This view, for example, is shown in Mills' comments about the Sumter District in general:

> the flat lands, and those in the vicinity of the swamps, have the air contaminated more or less with their miasma, which produces agues and fevers during the autumn, and, from their excessive moisture, pleurisies in the spring. The high pine lands, a little distant from the swamps, are healthy (Mills 1972:746 [1826]).

The healthful climate of the Sandhills is demonstrated by the number of wealthy coastal planters who established summer homes in the "High Hills" just as the "unhealthy climate" of Sumterville is attested to by the slow growth of the village (Gregorie 1954:92).

The other two villages were Statesburg and Manchester. Statesburg was established in 1783 by Thomas Sumter with the intention that it would become the new state capital. The village, the remnants of which are situated on SC 261 immediately north of US 76/378, was to be connected to the Wateree River by a canal, but the project failed and the village gradually declined (Dargan 1922:7; Morrison 1980:21). Manchester appeared by 1795 and was situated on the Kings Highway, adjacent to the Wateree River Swamp. The town had decayed by 1843, probably because of the prevalence of malaria (Morrison 1980:21-22).

Mills provides an interesting view of the area during the early nineteenth century, noting that "the soil is well adapted to the cultivation of cotton, (which is almost the whole staple product of the district) maize or Indian corn, cow pease, sweet potatoes, wheat, rye, oats, rice, etc." (Mills 1972:741-742 [1826]). His comments on the settlement pattern has considerable bearing on both the aboriginal and historical archaeological of the region:

> there is a number of what are called savannahs, bays, and cypress ponds in the flat parts of the country. The first are a kind of meadows, without a tree or a shrub, delightfully green, and having generally a good looking soil; yet after all this spacious appearance, the planters deem them not worth cultivating or enclosing (Mills 1972:744 [1826]).

The primary hindrance to the settlement of Sumter County during the early nineteenth century was the lack of adequate roads. Mills (1972:747 [1826]) notes that "the roads, in winter are exceedingly bad; scarcely passable to Nelson's

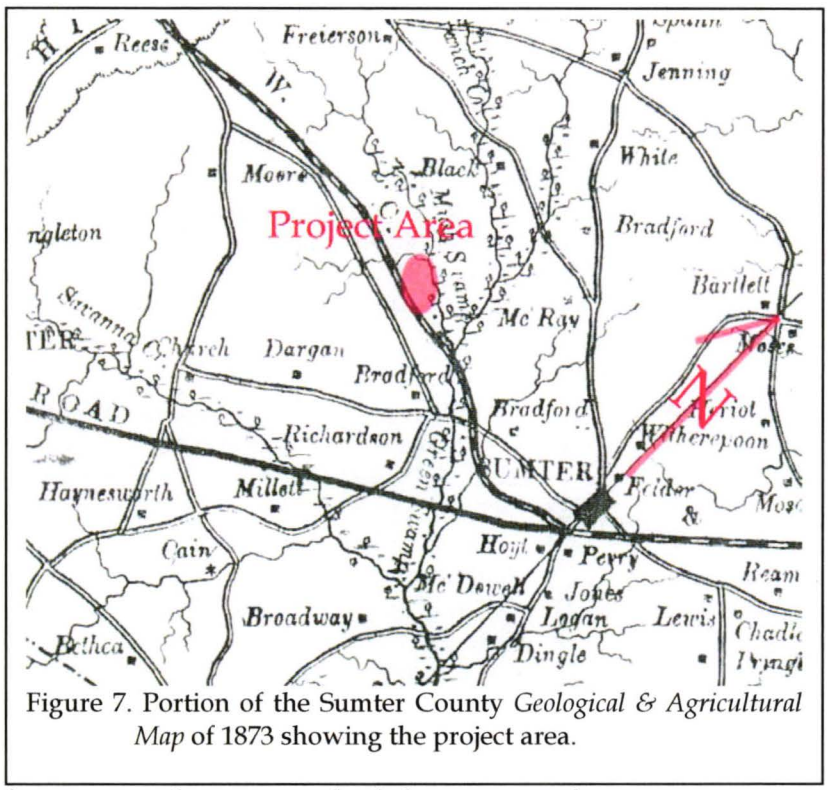

Figure 7. Portion of the Sumter County *Geological & Agricultural Map* of 1873 showing the project area.

ferry; cut up by narrow-wheeled wagons, and seldom worked on more than once a year." Because of the poor road system and the swamp environs, the settlement potential within the county was limited and a sparse pattern of villages resulted (see Morrison 1980:19-25). This is apparent in Mills' 1825 map of the Sumter District where no development has started (Figure 6).

Although the town of Sumterville continued to grow after its inception in 1800, aided to a considerable extent by the 1849 boom in cotton prices, significant growth did not occur until 1852 when the railroad network incorporated the town (Gregorie 1954:105; Morrison 1980:8). In 1855 the name of Sumterville was changed to Sumter (Gregorie 1954:107). Because the road system was so poor the railroads achieved early and near total dominance in the transportation network, with a series of 10 railroads being constructed from 1848 through 1915 (Morrison 1980:29).

While in 1850 only two of the five settlements (excluding Sumterville) in Sumter County were on a railroad line, by 1900 24 or the 40 settlements (excluding Sumter) were on a railroad line (Morrison 1980:43). This rail dominance continued until the Great Depression when two railroads were abandoned and numerous stations were closed (Morrison 1980:8). The Dalzell station, situated east of the project, consists of a combination depot built in 1899. The station was discontinued in 1935 because the Northwestern Railroad of South Carolina was abandoned. In 1936 the depot building was sold for $200 and, for a time, was used as a storage warehouse. Morrison (1980:108-109, Figure 7) indicates that the building is no longer used, but is standing.

The Civil War had relatively little impact on Sumter County until the final year. On April 5, 1865 Brigadier General Edward Pottery left Georgetown to march overland to Sumter. On April 9 the Confederate forces defending the approach to Sumter were routed at Dingle's Mill and the Union forces under Potter arrived in Sumter that same day. The town was partially burned and continued under military occupation during the summer of 1865. Sumter was one of 10 Freedmen's Bureaus established in South Carolina, although only 454 acres were actually purchased during its operation (Gregorie 1954:260-273). Gregorie (1954:273) notes that there was relatively little fraud in Sumter County, possibly because there was so little wealth in the county.

The Black Codes were established, creating a low wage system under which blacks were forced to work in a modified form of slavery (Gregorie 1954:274; Reid 1973:107-110). Burke et al. (1943:6) note that once farming began using hired labor the lack of capital "forced many planters into the one-crop system and initiated the tenant system." The renting or sharecropping which

emerged in place of slavery limited all small farmers and encouraged the excessive production of cotton. The tenant farmers were unable to escape the monopoly of the rural merchants, who had risen to replace the destroyed antebellum credit system, and became subservient to the production of cotton. Most of the South's cotton was grown with borrowed money, with the land serving as the security for the whole debt structure.

South Carolina was contained in Military District 2, set up by Congress in March 1867 and by October 1871, President Grant suspended the writ of habeas corpus in nine South Carolina counties as a result of Klan terror (Gregorie 1954:7). Sumter was not among these nine counties and Simpkins and Woody (1966:457) suggest that there is little evidence of Ku-Klux-Klan activity in the Sumter area during Reconstruction.

The railroads destroyed during the Civil War were rebuilt and the Camden Branch of the South Carolina Railroad was reopened in May 1867. By 1872 Gregorie (1954:317) states that Sumter was "booming." A 1873 *Geological & Agricultural Map of Sumter County,* however, shows that activity has yet to take place in or near the project corridor (Figure 7).

As a result of the Civil War, Bennett et al. (1909:302) note that the production of livestock declined and the acreage of wheat was reduced to almost nothing. Cotton became the chief crop and the subsistence crops were essentially abandoned. Burke et al. (1943:6) state, "gradually the owners of farms and plantations became more or less centralized in town and cities, and the farms were turned over more and more completely to the tenants." This system continued, basically unaltered until the fall in cotton prices during the 1890s. A developing theme is the inability of Sumter County farmers, after the introduction of cotton monoculture, to provide the necessary subsistence crops. Mills (1972:747 [1826]) notes that while the early nineteenth century planters supplied themselves from Charleston, subsistence crops were "raised in sufficient quantities for human consumption" (Mills 1972:742 [1826]). By the turn of the century Bennett et al. (1909:304) noted that many farmers "do not produce enough of these commodities [meat and corn] to carry them through the winter, while others purchase almost all their home supplies." Burke et al. (1943:6-7) almost point out that the cotton produced in 1934 was only 80% of that produced in 1899, suggesting that *all* yields declined over time in Sumter.

The maximum cotton prices in Sumter County occurred in 1889, although they declined to about half of their previous levels by 1934. Bennett et al. (1909:304) suggest that low prices in 1897 were primarily responsible for the diversification in crops after the 1890s, although others writing a number of years later, believe that it was not until the advent of the boll weevil in 1922 that farm policy actually changed. One newspaper editorial reported that the weevil had "put a stop to the lazy man's crop," and that now planting "took brains, money, hard work, and poison to raise cotton hereabouts these days" (quoted in King 1981:338).

During the period from 1910 to 1940 the proportion of black farmers showed a decrease from 74.5% to 70.4%, although the percentage of black tenant farmers remained stable at 83.7 to 82.9%. The quantity of land in farms decreased from 73.1% in 1910 to 53.5% in 1940. Tenancy rates fell from 72.8% in 1910 to 66.5% in 1940, although the highest tenancy rate, 73.8%, occurred in 1930. Bennett et al. specify that the most common form of tenancy in the area was renting with:

> the rentals ranging from $2 to $10 per acre [they report land sold for $10 to $75 per acre], depending on the productiveness of the soil. The tenants are generally furnished their supplies by the merchants, who take a lien on the prospective crop and on the stock used in its cultivation. The landowner always receives his

rent first (Bennett et al.1909:305).

By 1935 over half of the tenants were still cash renters, with the price of the rent down to $1.50 to $3.50 an acre (Burke et al. 1943:9).

Early in the depression, E.C. Branson commented on the state of knowledge about tenant farmers, sounding almost like an archaeologist in the late 1980s or early 1990s:

> In cold figures we know nearly all there is to know about farm tenants the country over -- the number, the ratios, the types, and the increases or decreases in each state since 1880[4]; and, in recent years in certainly closely surveyed areas in the South and Middle West, cold figures have told us much about their farm practices, their labor incomes, and the havoc they work upon soils and farm buildings. But we know much less, in most states nearly nothing, about the tenant as a human being -- his home life, his church and school interests, his habits and hopes, and the part he has played in lifting or lowering the level of civilization in his home community. We have reckoned him in dollars and cents; we have not yet appraised him as a home-maker or as community builder or destroyer in free American democracies (Branson 1923:215).

This wealth of documentary evidence includes, besides the federal census records collected every 10 years, studies such as Woofter's (1936) *Landlord and Tenant on the Cotton Plantation* and *The Farm-Housing Survey* conducted by the Bureau of Home Economics (1939). Just as observed by Branson, it is possible, using these and other data sources, to offer reconstructions of tenancy. For example, in South Carolina the average tenant house was 25 to 50 years old (although over 12% were older than 50 years), was of unpainted frame cons-truction, had 4.5 rooms, lacked lighting, refrigeration, or a power washing machine, were in generally poor condition, and lacked screens. Most relied on dug wells, although between 10% and 16% used nearby springs. Nearly a third had no toilet facilities, although most used what was referred to in the studies as an "unimproved outdoor toilet," or privy. Over 97% used wood stoves for cooking.

Table 1
Systems of Tenure

	Share-Cropping	Share Renting	Cash Renting
Landlord furnishes:	land housing fuel tools work stock seed half of fertilizer feed for stock	land housing fuel 1/2 or 1/3 fertilizer	land housing fuel
Tenant furnishes:	labor half of fertilizer	labor work stock feed for stock tools seed 3/4 or 2/3 fertilizer	labor work stock feed for stock tools seed fertilizer
Landlord receives:	1/2 of crop	1/4 or 1/3 of crop	fixed amount in cash or lint cotton
Tenant receives:	1/2 of crop	3/4 or 2/3 of crop	entire crop less fixed amount

[4]This was somewhat overstated since it was not until 1920 that the federal census recognized the distinction between renters and croppers among tenants.

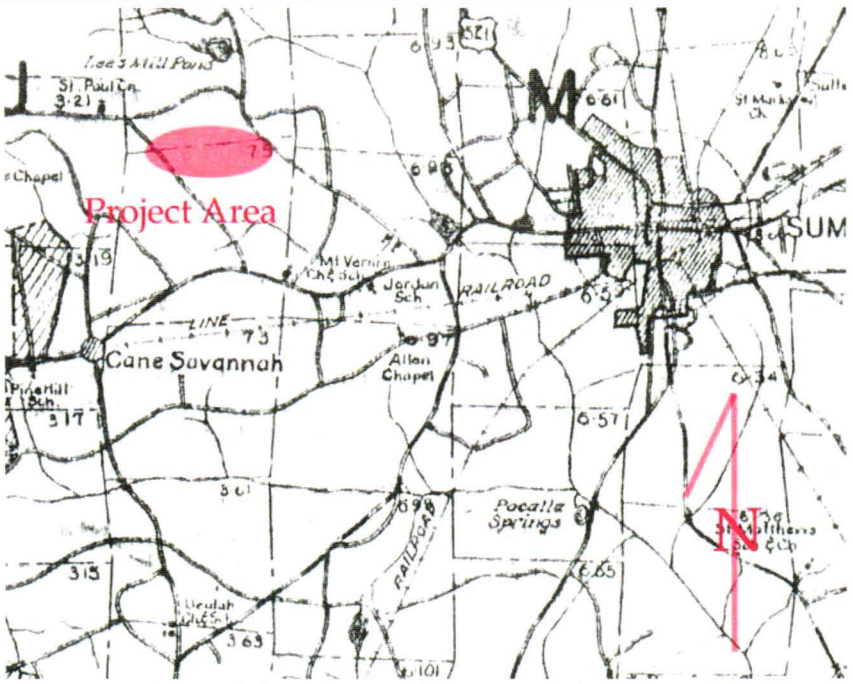

Figure 8. Portion of the 1941 Lynches River Soil Conservation District showing the project area.

From these studies we can learn that black tenants were more stable and less likely to move than whites, that when tenants moved they typically didn't move very far, and that while black and white tenants were found on many plantations, at least 53% used only black tenants.

Sumter County is within the Atlantic Coastal Plain of the Cotton Region, immediately adjacent to what is called the Black Belt (Woofter et al. 1936; Southern Regional Study, Southern Historical Collection, University of North Carolina at Chapel Hill). The Atlantic Coastal Plain has medium sized plantations, while the Black Belt is the heart of the oldest Southern cotton plantations. As a consequence of these historical differences the two regions developed distinctively different forms of tenancy. Sumter County, at the edge of the two areas, may be expected to exhibit mixed characteristics.

There was little difference in owner wealth between the two areas and the difference in net income per average plantation ($5,343 compared to $3,087) is partially the result of the smaller average plantation size in the Black Belt. There was considerable difference in the net income of tenants in the two areas. In the Atlantic Coastal Plain cropper's families averaged $519 ($5,238 in 1992 dollars) and share-renter's families averaged $833 ($8,408 in 1992 dollars) a year. The tenants in the Black Belt fared far worse, with the croppers' average income about $127 and the share-renters' income about $106. In addition, the tenancy rates varied from 60% in the Atlantic Coastal Plain to 73% in the Black Belt. The Atlantic Coastal Plain tenancy system, however, had a higher proportion of wage tenants (10.7%) than did the Black Belt (1.8%). This suggests that Sumter County, with its high percentage of wage tenants, had a strong tie to the Atlantic Coastal Plain.

It is difficult to imagine life on 8 to 164 a day, or $833 a year, even when these figures are converted to 1992 dollars, yet the reality is made even clearer when Woofter explains where this income was spent -- 64.4% on food (flour or corn meal accounting for 23.3%, lard for 12.1%, meat for 9.1%, sugar for 5.5%, condiments for 5.4%, coffee for 2.5%, molasses for 1.7%), 14.2% on clothing, 3.3% on medicine (in spite of threats such as typhoid, pellagra, and malaria), 5.5% on tobacco, and 12.6% on other household items. To this generalized picture of tenancy, authors such as Johnson et al. (1935) added a social dimension, trying to explain the life of tenant farmers:

> The Kingdom of Cotton, reared first upon the backs of black slaves, is supported today by an ever-increasing horde of white and black tenants and

sharecroppers whose lives are hopelessly broken by the system. . . . The cultural landscape of the cotton belt has been described as a "miserable panorama of unpainted shacks, rain-gullied fields, straggling fences, rattle-trap Fords, dirt, poverty, disease, drudgery, and monotony that stretches for a thousand miles across the cotton belt" (Johnson et al. 1935:1, 14).

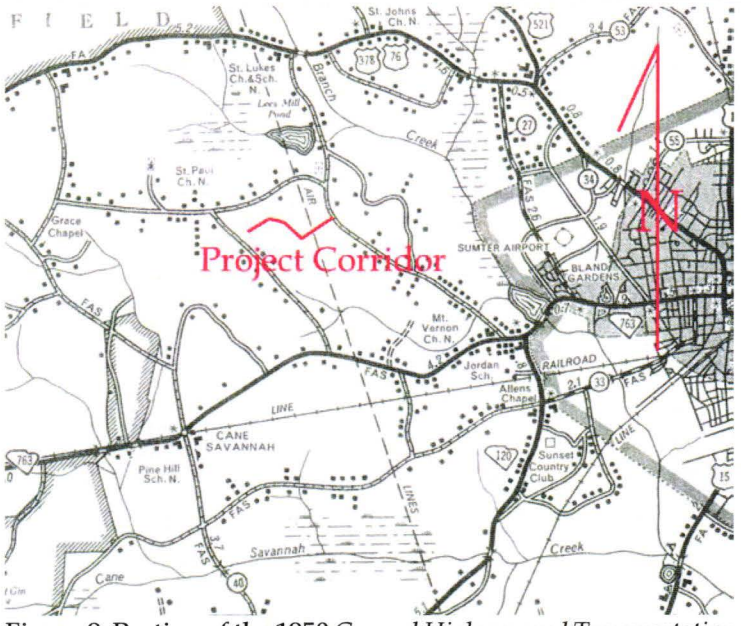

Figure 9. Portion of the 1950 *General Highway and Transportation Map of Sumter County* showing the project corridor.

Of particular interest are more recent efforts by historians and archaeologists alike to redefine the nature of Southern plantations, exploring how tenancy changed the face of those plantations. Prunty (1955), for example, argues that plantations are simply agricultural factories and while the labor pattern changed after the Civil War, the plantations continued. Others, such as Orser (1988) have begun exploring how the changing labor patterns changed the settlement patterns. The antebellum plantation with its distinctive slave settlement was slowly changed after the Civil War, balancing work needs against those of community and kin. For the most part, when compared to slavery, tenancy is often a more dispersed settlement pattern (see, for example, Orser 1988; Prunty 1955:472). It has been argued that this dispersion can be explained on the basis of energy expenditure per return (not having to walk long distances to one's field) or risk aversion (wanting to keep watch over economically important crops).

The 1950 *General Highway and Transportation Map of Sumter County* shows an increase of structures from the earlier maps, however, it appears that no structures are on the survey corridor (Figure 9).

METHODS

Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along the centerline of the corridor right-of-way, which measures 75 feet.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially from the tap at 0+00 to the substation at 59+55. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

A total of 60 shovel tests were excavated along the corridor. No testing was performed at the substation lot due to the grading of the lot. However, a pedestrian survey was still performed. Additional testing was performed for the identified site, 38SU300.

The GPS positions were taken with a Garmin GPS 76 rover that tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. This was a vital concern for the study area.

GPS accuracy is generally affected by a number of sources of potential error, including errors with satellite clocks, multipathing, and selective availablity. Satellite clock errors can occur when the satellites' clock is off by as little as a millisecond, or when a slightly-askew orbit results in a distance error. Multipathing occurs when the signal bounces off trees, chain-link fences, or bodies of water. Multipathing was probably not a significant source of error for this study since the site area was in an open area with few trees interfering. The source of most extreme GPS errors is selective availability (SA), the deliberate mistiming of satellite signals by the Department of Defense. This degradation results in horizontal errors of up to 100 m 95% of the time, although the error may be as much as 300 m. Nevertheless, selective availability has been turned off by the DOD. We have previously determined the 3D[1] and DGPS readings with the Garmin 76 were identical. Therefore, we relied on 3D navigation mode, with expected potential horizontal errors of 10 m or less.

[1]A basic requirement for GPS position accuracy is having a lock on at least four satellites, which places the receiver in 3D mode. This is critical B as an example, positions calculated with less than four satellites can have horizontal errors in excess of a mile, or over 1,600 m.

Figure 10. View of graded substation lot.

Architectural Survey

As previously discussed, we elected to use a 0.5 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before 1950. Typical of such projects, this survey recorded only those which have retained "some measure of its historic integrity" (Vivian n.d.:5) and which were visible from public roads.

For each identified resource we would complete a Statewide Survey Site Form and at least two representative photographs were taken. Permanent control numbers would be assigned by the Survey Staff of the S.C. Department of Archives and History at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History. Sumter County does not have a comprehensive survey, however a 1978-79 survey was completed in the general area, which identified Dinkins Plantation. Nevertheless, the roads within 0.5 mile of the transmission line were driven to see if any historic structures existed.

Site Evaluation

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b. that are associated with the lives of persons significant in our past; or

> c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

> - identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;
>
> - identification of the historic context applicable to the site, providing a framework for the evaluative process;
>
> - identification of the important research questions the site might be able to address, given the data sets and the context;
>
> - evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and
>
> - identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

For architectural sites the evaluative process was somewhat different. Given the relatively limited architectural data available for most of the properties, we focus on evaluating these sites using National Register Criterion C, looking at the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials -- the physical items used on and in the property -- are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Laboratory Analysis

The cleaning and analysis of artifacts was

conducted in Columbia at the Chicora Foundation laboratories. These materials have been catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site form for the identified archaeological site has been filed with the South Carolina Institute of Archaeology and Anthropology. Field notes and photographic materials have been prepared for curation using archival standards and will be transferred to that agency as soon as the project is complete.

Analysis of the collections followed professionally accepted standard with a level of intensity suitable to the quantity and quality of the remains. In general, the temporal, cultural, and typological classifications of historic remains follow such authors as Price (1979) and South (1977).

RESULTS OF SURVEY

Introduction

As a result of this cultural resources survey one archaeological site (38SU300) was recorded (Figure 10). This site is recommended not eligible for the National Register for lack of integrity and inability to address significant research questions.

The architectural survey did not identify any structures or other resources which might be eligible for the National Register of Historic Places.

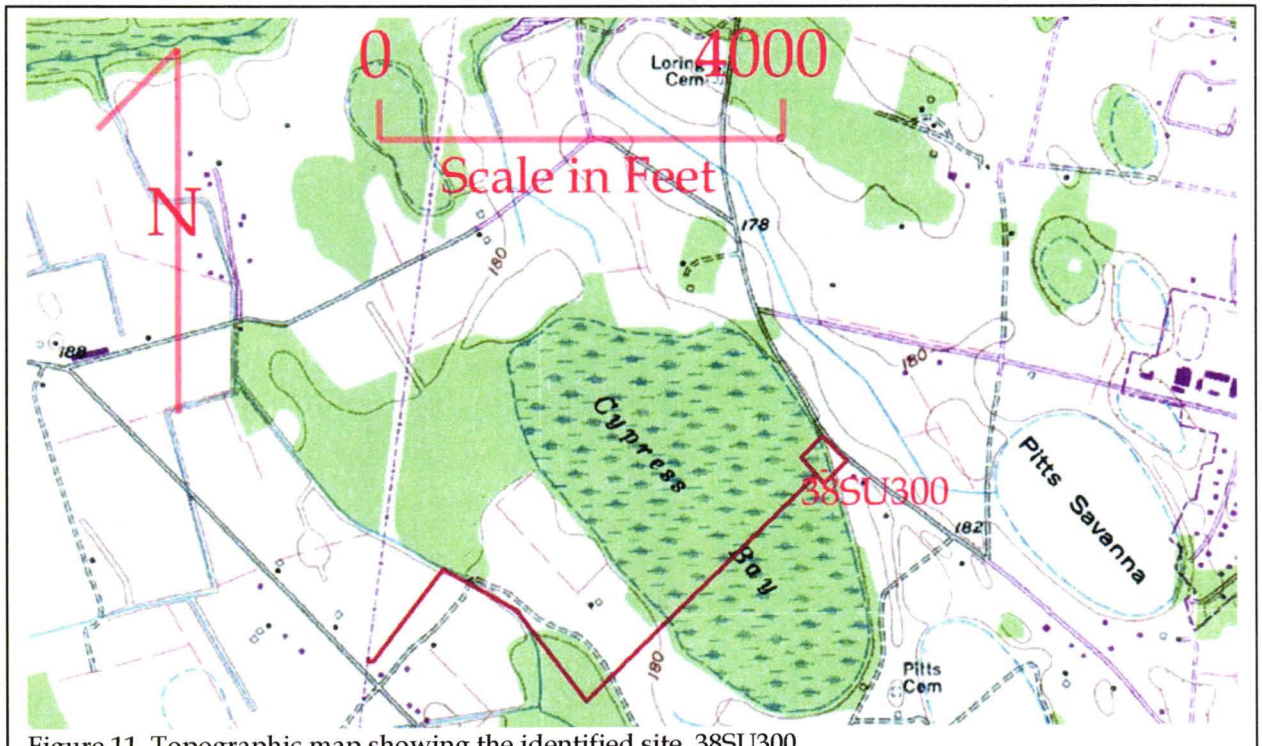

Figure 11. Topographic map showing the identified site, 38SU300.

Archaeological Resource

38SU300

Site 38SU300 is a late nineteenth to early twentieth century surface scatter situated in a cypress bay that has been graded into a substation lot. It is located at an elevation of about 160 feet AMSL. A central UTM coordinate for the site is 553757E 3754652N (NAD27 datum).

Shovel testing was originally completed at 100-foot intervals along the corridor, however, the substation lot had already been altered (graded) and was ready for construction of the above ground utilities. No shovel testing was performed on the substation lot, however a pedestrian survey was performed. In this survey, we found a small surface scatter of artifacts in the fill between the original ground surface (currently part of the cypress bay) and the surface of the substation lot, which rises about three feet from the original ground surface.

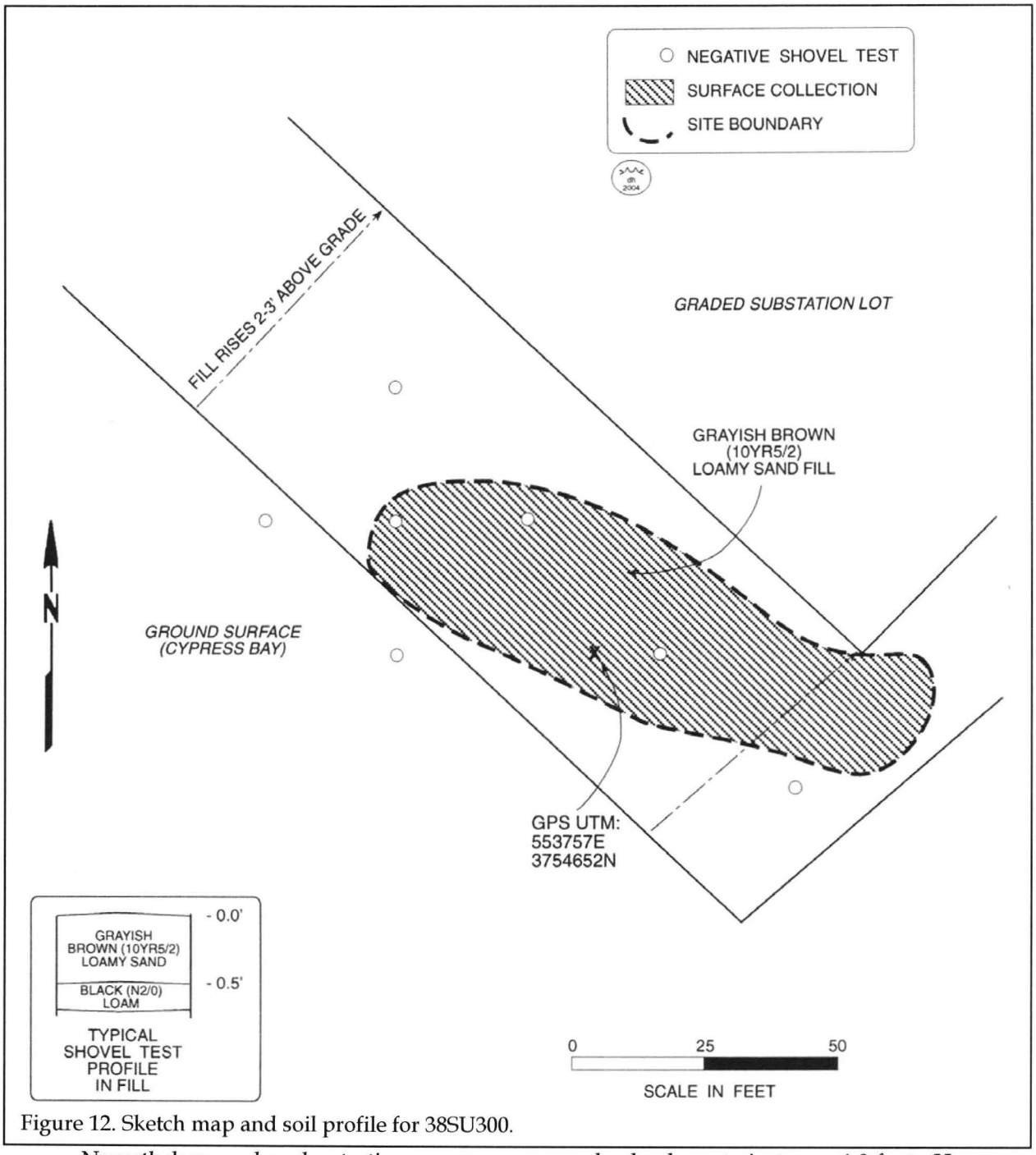

Figure 12. Sketch map and soil profile for 38SU300.

Nevertheless, shovel testing was performed at 25-foot intervals within the site area, but no tests were positive. Without land alteration, the soil profiles would be a Pantego loam with an A horizon of black (N2/0) loam to a depth of 0.9 foot over a very dark gray (10YR3/1) sandy clay loam to just over 1.0 foot. However, the fill, which contained the surface artifacts, was a grayish brown (10YR5/2) loamy sand that extended 0.5 foot in depth to the black (N2/0) loam. So at least 0.5 foot of fill has been added to build up the substation.

The fill may have come from further up the hill to the east toward Loring Mill Road. Loring Mill Road is currently being reworked with soil being shifted. Two soil series, Troup and Orangeburg, are found closer to the road and appear to be likely candidates for providing the fill (Orangeburg soils have an A horizon of grayish brown (10YR5/2) loamy sand and Troup soils have an A horizon of dark gray (10YR3/1) sand.) It is unclear, however, were exactly the fill was collected.

Figure 13. View of 38SU300 next to the substation.

The artifacts collected date around the late nineteenth to early twentieth century (Table 2). The site area is approximately 100 feet east-west by 40 feet north-south. A total of nine artifacts were collected, representing glass and ceramic. One cobalt jar was found, which dates to the nineteenth century. In addition, manganese glass also dates to the nineteenth century.

It has already been determined that the integrity of the site has been severely damaged. We do not know the origin of the fill and therefore the origin of the site. In addition, very few remains were found, representing very few data sets. Even if the site integrity were not in question, it is unlikely that the remains could be used to address significant research questions such as diet or status.

Site 38SU300 is recommended not eligible for the National Register of Historic Places. No additional management activity is recommended pending review by the State Historic Preservation Office.

Architectural Resources

There are no previously recorded National Register buildings, districts, structures, or objects in the 0.5 mile APE. The 1978-79 survey by Gray and Kolbe identified one resource, Dinkins Plantation, at the edge of the 0.5 mile APE.

At the time the evaluation of the site was that the house (ca. 1810) was "too altered" for the National Register (S.C. Department of Archives and History site card by W. Gray 7-6-78). However, a photograph of the structure was missing from the file. During the current survey, Dinkins Plantation was revisited.

Table 2.
Artifacts from 38SU300

	Surface
Whiteware, hand painted	1
Stoneware, Albany ext. Bristol int	1
Glass, brown	3
Glass, aqua bottle neck	1
Glass, cobalt jar	1
Glass, manganese	2
TOTAL	9

Figure 14. View of the main house at Dinkins Plantation.

The structure that was seen is thought to be the structure noted by W. Gray. However, another structure was found on the property that had been recently destroyed by a fire. Old pillars were still standing, so the house was most likely a pre-1950 structure. We are not completely certain that this house was not the house described by W. Gray in 1978, however it is more probable that the house still standing is the correct structure.

Nevertheless, the standing structure is recommended not eligible for the National Register for its modern building additions to the rear of the house and repairs to the chimneys. Also, this structure is situated about 3,000 feet east of the substation - just beyond the 0.5 mile APE.

In addition, the current project is not within sight of the Plantation, which is situated off the main road in woods. The area surrounding the project has already been reworked with new roads and neighborhoods. In fact, to get to the Plantation, you must enter through a newly built neighborhood. The development is sprawl from the nearby city of Sumter and has overtaken much of the area. The current project will have no affect on the Plantation.

No additional structures were found in the 0.5 mile APE that appear to contain the integrity for the National Register of Historic Places.

CONCLUSIONS

This study involved the examination of approximately 1.1 miles of corridor and a substation in central Sumter County to be used for a transmission line. This work, conducted for Mr. Tommy L. Jackson of Central Electric Power Cooperative examined archaeological sites and cultural resources found on the proposed project corridor and is intended to assist Central Electric Power Cooperative in complying with their historic preservation responsibilities.

As a result of this investigation, one archaeological site, 38SU300, was identified. Site 38SU300 is a sparse late nineteenth to twentieth century surface scatter found in fill. Because of its poor integrity and inability to address significant research questions, the site is recommended not eligible for the National Register of Historic Places.

A survey of public roads within 0.5 mile revealed no structures that retain the integrity for the National Register of Historic Places. Dinkins Plantation, recorded in 1978-79, is still recommended not eligible for the National Register. Nonetheless, the current project will have no affect on the Plantation given the distance and the intensity of surrounding development, which has altered the feeling and associations of the property.

It is possible that archaeological remains may be encountered during construction activities. As always, contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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